



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Application Number : 10/647,795 Confirmation No. 2065
Applicant : Walter H. Delphin *et al.*
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Tech Cntr/GAU : 1714
Examiner : Matthew Thexton
Entitled : Acrylic Compositions
Attorney Reference : 011793-0007-999
Customer Number : 20583

MAIL STOP REISSUE

Commissioner for Patents
P.O. Box 1450
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DECLARATION UNDER 37 C.F.R. §1.132 of FAREEDUDDIN FAROOQ

I, Fareeduddin Farooq, hereby declare as follows:

1. I have worked in the field of acrylic polymers for over 25 years, initially as an R&D Engineer at Dupont from 1980 to 1985, Senior Engineer from 1986 to 1991. Since 1992, I have worked as a Technology Associate at DuPont/ICI/Ineos Acrylics/Lucite International, Inc. I was appointed to the 3rd rung of the Scientific Ladder during 1997.
2. I obtained a B. Tech. in Chemical Engineering in 1968 from the Indian Institute of Technology in Madras, India; a Master of Engineering in Chemical Engineering in 1970 from the City University of New York; and a Master of Science in Computer Science in 1988 from the University of Memphis.
3. I am a co-inventor on and have reviewed the above-identified application.
4. Figure 1 of the present application is a graph showing the effect of comonomer concentration on the extent of swelling and the swelling rate of particles used in the composition over time.

5. The composition of the polymeric particles used for Figure 1 is shown in the Table , below.

Ingredients	% (w/w)				
Monomer – methyl methacrylate	94.76	90.76	86.76	83.76	78.76
Comonomer – ethyl acrylate	4	8	12	15	20
Crosslinker – ethylene glycol dimethacrylate	0.7	0.7	0.7	0.7	0.7
Chain Transfer Agent - dodecyl mercaptan	0.467	0.467	0.467	0.467	0.467

6. The size of the particles used in Figure 1 was about 250 to 600 microns prior to mixing the particles with the matrix.

7. The presently claimed acrylic composition with particles having a comonomer amount of 12 to about 20% has provided us with the ability to manufacture an acrylic composition that can be substantially cured in less than two hours (in accordance with industry practices) but still have sufficiently swelled particles (due to extent of swelling) for a controlled amount of time, giving the desired granite appearance, and which is still capable of being thermoformed at standard temperatures (360 to 420°F) by manufacturers of hot tubs and bath without excessive sagging or splitting of the composition and/or finished product.

8. I have found a specific balance between the amounts of comonomer and crosslinker in the claimed acrylic composition exists providing an acrylic composition that is suitable for processing into a product having a granite appearance.

9. I hereby declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001, of Title 18, of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 1-16-2008

Fareeduddin Farooq

Fareeduddin Farooq